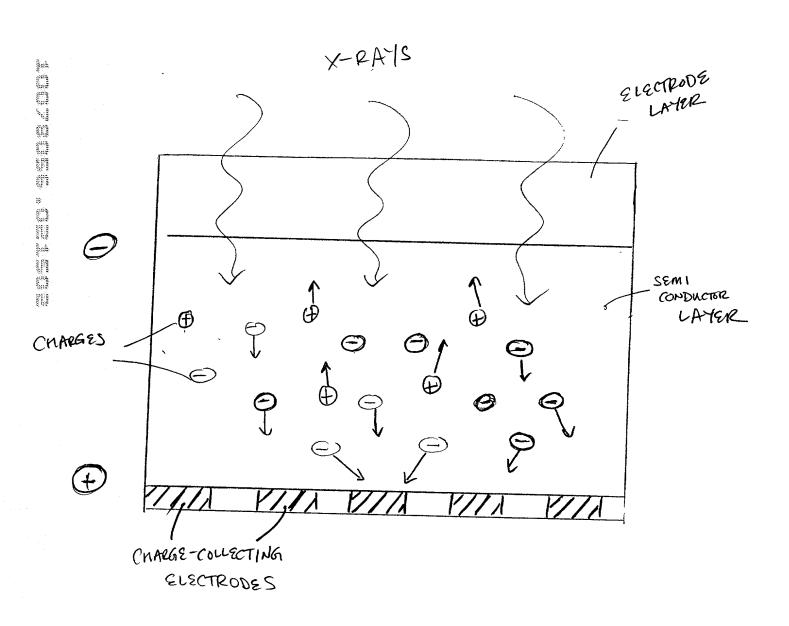
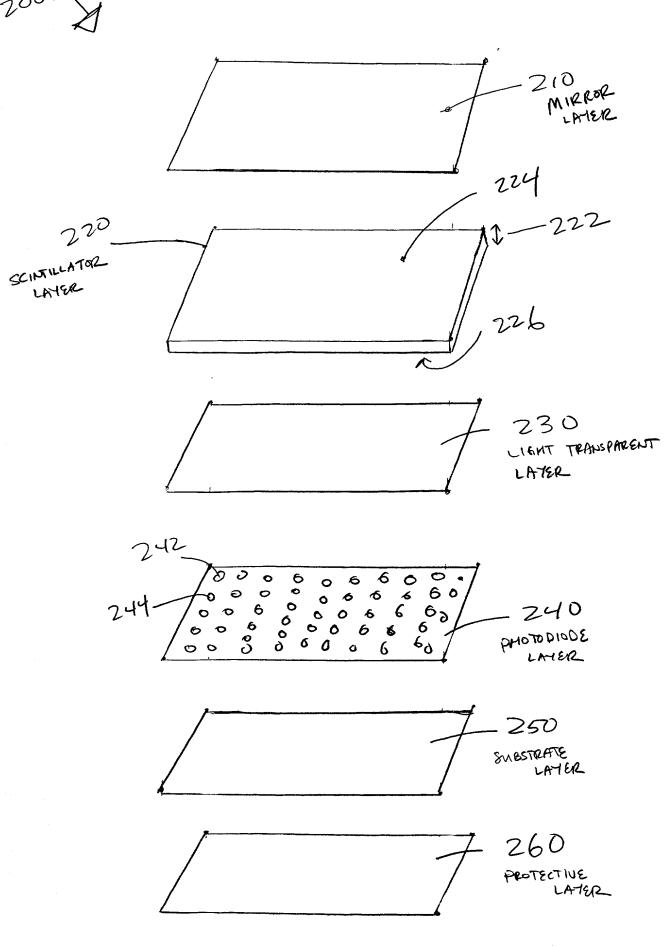


FIG. 1A

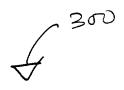


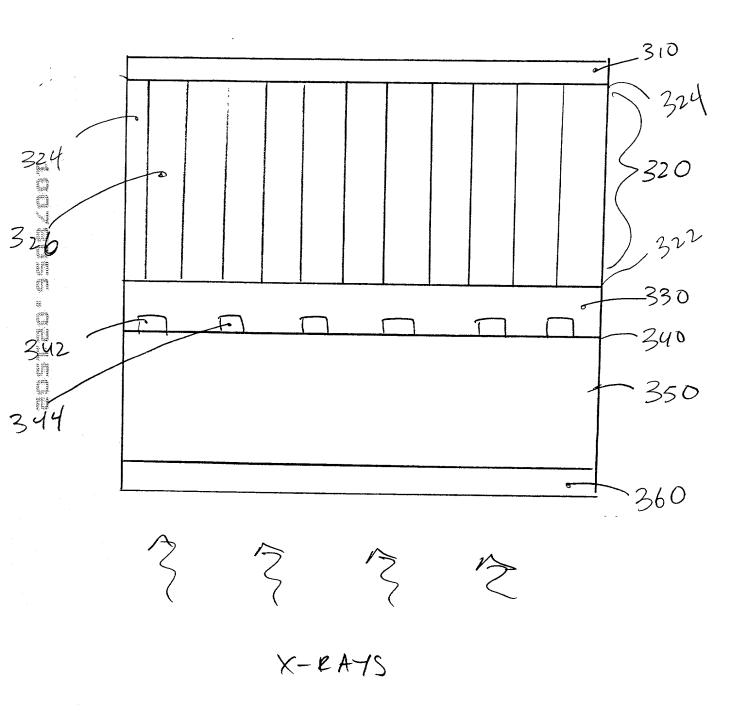
1 :

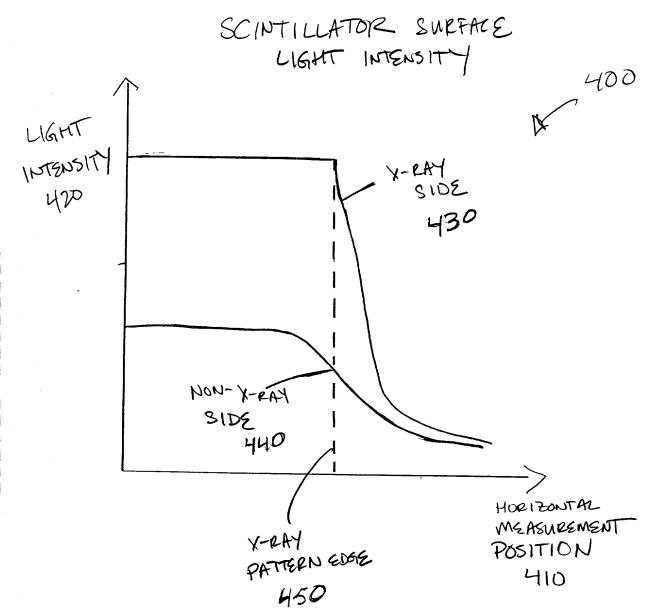
FIG. 1B



F16.2

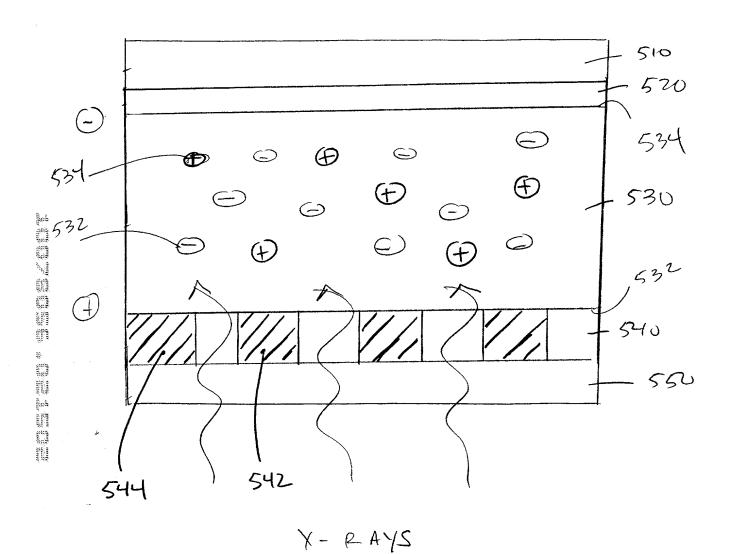




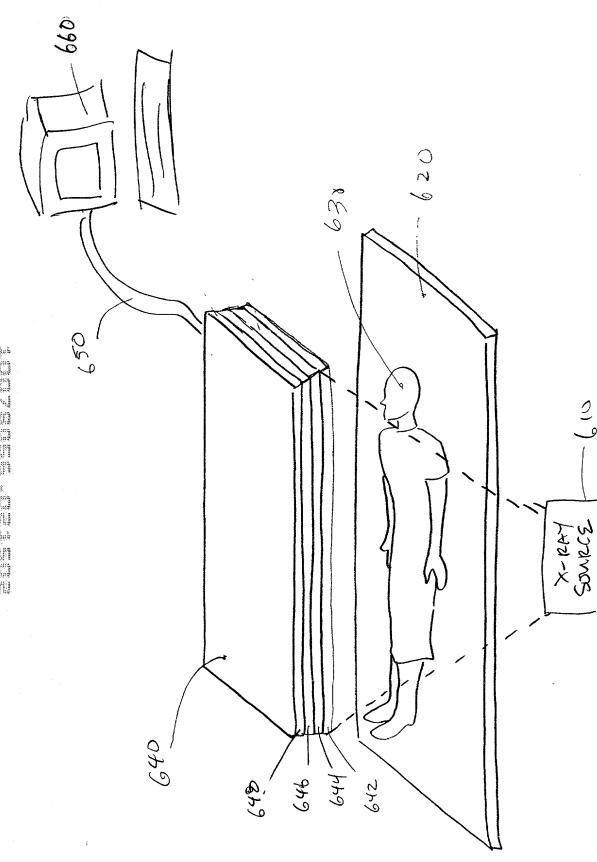


F16.4





F16.5



F16.6

Transmitting x-rays through a substrate layer having a top surface and a bottom surface, the top surface having a photosensitive device.

Receiving the x-rays incident on a scintillator layer after the transmission through the substrate layer.

The scintillator layer having a first surface adjacent to the photosensitive device and a second surface farther away from the photosensitive device relative to the first surface, and receiving the x-rays at the first surface of the scintillator layer before propagating through the scintillator layer.

Generating a greater light intensity near the first surface of the scintillator layer adjacent to the photosensitive device relative to the second surface of the scintillator layer

Detecting by the photosensitive device visible light generated from the scintillator.

Sending an image data to a display system.

Transmitting x-rays through a chargecollecting layer.

Receiving the x-rays incident on a semiconductor layer after the transmission through the substrate layer.

The semiconductor layer having a first surface adjacent to the charge-collecting layer and a second surface farther away from the charge-collecting layer relative to the first surface, and receiving the x-rays at the first surface of the semiconductor layer before propagating through the semiconductor layer.

Detecting by the charge-collecting layer electrical charges generated from the semiconductor layer.

Generating a greater electrical charge near the first surface of the semiconductor layer adjacent to the charge-collecting layer relative to the second surface of the semiconductor layer.

Sending an image data to a display system.

F1G. 7B

